

Primer sets comprising major analytical pipelines at CCDB

Name	Ratio	Cocktail name / Primer sequence 5'-3'	Taxonomic Groups	Reference
<b>Regular primer pairs</b>				
		Folmer primers	various phyla	Folmer et al. 1994
LCO1490		GGTCAACAAATCATAAAGATATTGG		
HCO2198		TAACTTCAGGGTGACCAAAAAATCA		
		Lepidoptera primers	insects, amphibians	
LepF1		ATTC AACCAATCATAAAGATATTGG		Hebert et. al. 2004a
LepR1		TAACTTCTGGATGTCCAAAAATCA		Hebert et. al. 2004a
MLepF1		GCTTTCCACGAATAATAATA (use with LepR1)		Hajibabaei et al. 2006
MLepR1		CCTGTCCAGCTCCATTTTC (use with LepF1)		Hajibabaei et al. 2006
		Bird primers	birds	Hebert et al. 2004b
BirdF1		TTCTCCAACCACAAGACATTGGCAC		
BirdR1		ACGTGGGAGATAATTCCAATCCTGG		
<b>M13-tailed cocktails</b>				
		C_VF1LFt1 – C_VR1LRt1 (Mammal cocktail)	mammals, reptiles, fish, amphibians	Ivanova et al. 2007
LepF1_t1	1	TGTA AACGACGGCCAGTATTCAACCAATCATAAAGATATTGG		
VF1_t1	1	TGTA AACGACGGCCAGTCTCAACCAACCACAAGACATTGG		
VF1d_t1	1	TGTA AACGACGGCCAGTCTCAACCAACCACAARGAYATYGG		
VF1i_t1	3	TGTA AACGACGGCCAGTCTCAACCAACCAIAIGAIAITIGG		
LepR1_t1	1	CAGGAAACAGCTATGACTAAACTTCTGGATGTCCAAAAATCA		
VR1d_t1	1	CAGGAAACAGCTATGACTAGACTTCTGGGTGGCCRAARAAYCA		
VR1_t1	1	CAGGAAACAGCTATGACTAGACTTCTGGGTGGCCAAAGAATCA		
VR1i_t1	3	CAGGAAACAGCTATGACTAGACTTCTGGGTGICCIAAIAICA		
		C_FishF1t1 – C_FishR1t1 (Fish cocktail)	fish, mammals	Ivanova et al. 2007
VF2_t1	1	TGTA AACGACGGCCAGTCAACCAACCACAAGACATTGGCAC		
FishF2_t1	1	TGTA AACGACGGCCAGTCTCAACCAACCACAAGATATCGGCAC		
FishR2_t1	1	CAGGAAACAGCTATGACTTCCAGGGTGACCGAAGAATCAGAA		
FR1d_t1	1	CAGGAAACAGCTATGACTACCTCAGGGTGTCCGAARAAYCARAA		
		Sequencing primers for M13-tailed PCR products		
M13F (-21)		TGTA AACGACGGCCAGT		Messing, 1983
M13R (-27)		CAGGAAACAGCTATGAC		Messing, 1983

## Primer References

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- Hebert PDN, Penton EH, Burns JM, Janzen DH, Hallwachs W (2004a) Ten species in one: DNA barcoding reveals cryptic species in the neotropical skipper butterfly *Asdrastes fulgerator*. *Proceedings of the National Academy of Sciences of the United States of America*, **101**, 14812-14817.
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